

ACANTHUS

An international newsletter to encourage interest in the Acanthaceae

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This number includes additions to and changes in the directory of those interested in Acanthaceae. It also includes a summary of services offered by respondents to the questionnaire mailed in 1987. Please consider sharing some of your knowledge about the family by contributing to the next ACANTHUS. Number 3 will appear later this year and will include a literature summary for 1987. Please send a list of your publications during 1987 for inclusion.

Additions to Directory

ACOSTA CASTELLANOS, Salvador, Herbario OAX, CIIDIR-IPN Unidad Oaxaca, Apdo. Postal 24-B, 68080 Oaxaca, Oaxaca, Mexico

BERNARDELLO, Luis, Department of Ecol. & Evol. Biology, Box U-42, TLS 166A, 75 North Eagleville Road, University of Connecticut, Storrs, Connecticut 06268, USA

Address Change

GETLIFFE NORRIS, Fiona, National Botanic Gardens, Kirstenbosch Private Bag X7, Claremont 7735, South Africa

Services Offered

BALKWILL offers naming of southern African Acanthaceae and exchange of duplicates.

BARKER offers naming of Australian Acanthaceae.

BLACKMORE offers advice on interpretations of pollen morphology.

BRUMMITT offers naming of African collections.

GETLIFFE NORRIS offers duplicates of southern African material and special collections where possible.

DANIEL offers naming of North and Central American Acanthaceae and exchange of Mexican collections.

DURKEE has DELTA computer programs for generating taxonomic keys and an on-line key to *Ruellia* in the U.S.A., Costa Rica, and Nicaragua; key possibly available to others via a micom switch.

EXCURRA offers Acanthaceae from Argentina.

HANSEN offers naming of Acanthaceae from tropical southeastern Asia.

HEDREN offers seeds of some Acanthaceae, mostly *Justicia* from East Africa.

HUMPHRIES offers naming of Central American Acanthaceae.

IMMELMAN offers naming of southern African Acanthaceae.

KELBESSA offers naming, collection, and photography of Ethiopian Acanthaceae.

LOTT offers collection of herbarium specimens, bud material, and seeds of Acanthaceae from northern Florida.

MCDADE offers naming of Central American and northwestern South American Acanthaceae and sharing cuttings/seeds of species she has in cultivation.

MEAGHER offers naming and collecting Acanthaceae in Florida.

RAMAMOORTHY offers naming Mexican Acanthaceae.

RZEDOWSKI offers collecting in Guanajuato, Queretaro, and northern Michoacan, Mexico.

SCOTT offers collecting and photography of Acanthaceae in the Chihuahuan Desert.

STEINER offers naming of *Phaulopsis* and Acanthaceae in Usambara Mountains, Tanzania.

SURYAKANTA offers collection of Indian Acanthaceae.

WASSHAUSEN offers naming, collecting, and exchanging Acanthaceae.

WOOD offers naming Arabian and Colombian Acanthaceae.

Some Relatively Obscure Genera in Acanthaceae

For some time I have been trying to up-date the genera of Acanthaceae recognised in the herbarium at Kew. At present I have a list of 30 genera under which we have no material and which I have no evidence of having been sunk into anything else. Many of them will certainly be "good genera" of which we happen never to have received specimens. Others, however, may have already been sunk into synonymy and I simply have not found the references. If anybody can throw any further light on any of these genera I should be pleased to hear from them. And of course if anybody just happens to have spare material of any of them which they don't want, I should be delighted to find a good home for it!

Of the 30 listed here, 25 appear to be monotypic, the exceptions being *Forcipella* with 5 described species, *Ritonia* with 3 species, and *Populina*, *Sapphoa* and *Trybliocalyx* each with 2 species.

I have to thank Dieter Wasshausen and Tom Daniel for already having deleted several genera from my original list (Tom by very kindly donating specimens of three Mexican endemic genera), and I look forward to being able to knock a few more off. The remaining ones are grouped geographically.

Cuba

Dasytropis Urb. and *Sapphoa* Urb. The first was compared by Urban to *Justicia* and *Centrilla* and perhaps may be included in a broad concept of *Justicia*. The second was accepted by Borhidi in *Nordic J. Bot.* 3: 353 (1983) with a second species described, but with no comment on generic relationships.

Central America

Solenoruellia Baill. (Mexico), *Standleyacanthus* Leonard (Costa Rica), and *Trybliocalyx* Lindau. The last was recognised by D. N. Gibson in *Fieldiana, Bot.* 32: 176 (1970) who added *Jacobinia albicaulis* Brandegees from Mexico to the original species *T. pyramidatus* Lindau from Guatemala. Despite its name, *Solenoruellia* was placed by Baillon in his *Justicieae*, not *Ruellieae*, though it has four stamens.

South America

Acanthura Lindau (Brazil), *Aphelandrella* Mildbr. (Peru), *Cephalacanthus* Lindau (Peru), *Cyphacanthus* Leonard (Colombia), *Morsacanthus* Rizzini (Brazil), and *Trichosanchezia* Mildbr. (Peru). The types of the Lindau and Mildbraed names were probably destroyed at Berlin. Does anybody have material under these names? *Aphelandrella* was said to differ from *Aphelandra* in corolla shape (campanulate in upper part) and broad anthers.

Madagascar

Ambongia Benoist, *Celerina* Benoist, *Conocalyx* Benoist, *Corymbostachys* Lindau, *Dolichostachys* Benoist, *Forcipella* Baill., *Leandriella* Bremek., *Melittacanthus* S. Moore, *Pericalypta* Benoist, *Podorungia* Baill., *Populina* Baill., *Pseudoruellia* Benoist, *Ritonia* Benoist, *Synchoriste* Baill., *Vavara* Benoist, *Vindasia* Benoist, and *Zygoruellia* Baill. These genera have all been recognized by Benoist in his various publications, and emphasise firstly the apparently high generic endemism of the family in Madagascar, and secondly the deficiencies of the Kew herbarium in this respect.

Asia

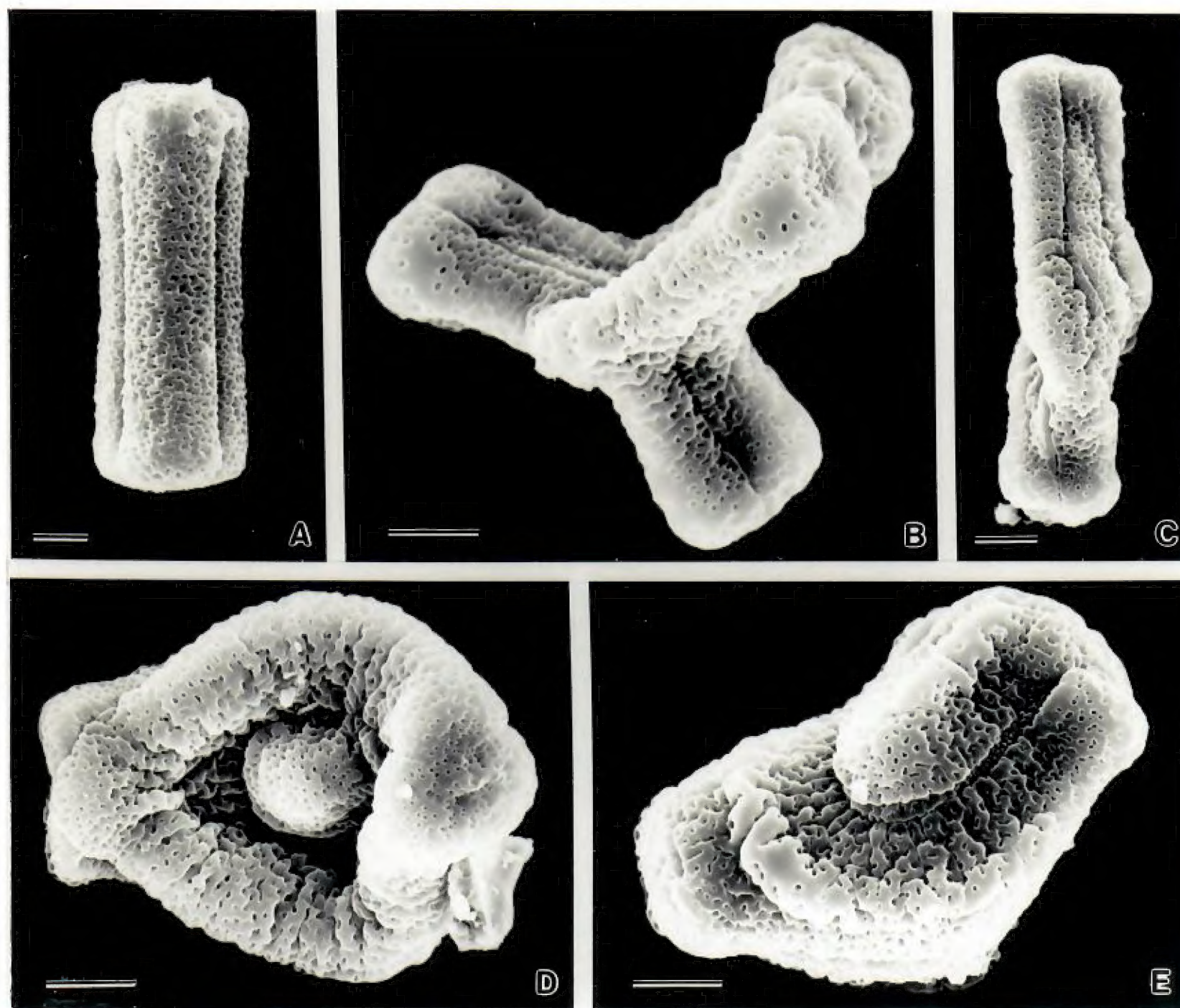
Haplanthoides H.W. Li (China) and *Kudoacanthus* Hosokawa (Taiwan). The first of these was described as recently as 1983, and the name is perhaps best to be treated as a homonym of *Haplanthodes* Kuntze which is in use for another genus of the tribe Andrographideae from Asia.

-R. K. Brummitt

Abnormal Pollen in *Crossandra* Salisb.

In the course of our investigations of the pollen morphology of the Acanthaceae at Kew, the highly irregular pollen grains shown in figs. B-E were obtained from a cultivated specimen of *Crossandra infundibuliformis* (L.) Nees grown in commercial horticulture. A normal pollen grain of *Crossandra puberula* Klotzsch, collected in the wild, is shown in fig. A for comparison. The abnormal pollen grains are t-shaped, or twisted, or have irregular apertures and/or an irregular shape. We assume that these irregularities are caused by the disruption of the pollen ontogeny due to abnormal growth conditions experienced by the plant during cultivation. Abnormal pollen in cultivated Acanthaceae has been recorded previously by Drahowzal (Osterreichische Botanische Zeitschrift 85: 241-269. 1936) and Huard (Pollen et Spores 7: 19-26. 1965).

-Carol Furness & Madeline Harley



Figs. A-E. Pollen of *Crossandra* (SEM). A, *Crossandra puberula* (Richards 17727), equatorial view of normal grain. B-E, *C. infundibuliformis* (from cultivated plants). B, t-shaped grain. C, twisted grain. D, grain with irregular shape and an irregular aperture. E, irregularly shaped grain. Scales = 10 μ m.